

[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#) | [Purchase History](#) | [Cart](#)

Welcome United States Patent and Trademark Office

[Search Session History](#)[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)

Edit an existing query or  
compose a new query in the  
Search Query Display.

Sun, 2 Sep 2007, 6:57:02 PM EST

Search Query Display

Select a search number (#)  
to:

- Add a query to the Search Query Display
- Combine search queries using AND, OR, or NOT
- Delete a search
- Run a search

Recent Search Queries

- [#1](#) (( helper thread<in>ab ) <and>switch\*)<and>user
- [#2](#) (( helper thread<in>ab ) <and>switch\*)<and>user
- [#3](#) (( helper thread<in>ab ) <and>switch\*)<and>user
- [#4](#) (( helper thread<in>ab ) <and>switch\*)<and>user
- [#5](#) ((( helper thread<in>ab ) <and> ( user<in>metadata ) )) <and>  
(pyr >= 1950 <and> pyr <= 2003)

Indexed by  
 Inspec

[Help](#) [Contact Us](#) [Privacy &](#)

© Copyright 2006 IEEE -

IP.com  
PriorArtDatabase

Secur

September 03, 2007

USPTO

**Search**[Full Text](#)[Concept](#)[Document ID](#)[Recent Disclosures](#)**Other**[Prior Art Home](#)[Support](#)[Logout](#)

Displaying records #1 through 10 out of 500  
(search stopped at 500 hits)

Result # 1      Relevance:

**Emulation of Switch to Supervisor**

1998-07-01

IPCOM000123239D

English

A method to allow privileged operating system code to execute with non-privileged access where no hardware facilities exist to support such operation.

Result # 2      Relevance:

**MATE: Micro Assist Thread Engine**

2004-04-07

IPCOM000027405D

English

We disclose POWERmate, an asynchronous PowerPC assistive processing facility based infrastructure. Using the the assistive thread facility, asynchronous threads can be executed in multiple thread contexts on a single (or multiple) processor cores. The ...

Result # 3      Relevance:

**Use of a Hardware Monitor to Create Send/Receive within CSRs**

1993-09-01

IPCOM000105704D

English

Given a sequential program the task of creating a set of CSRs that execute the program requires that memory accesses among shared data be coordinated using SEND/WAIT&I use of a hardware monitor to assist in this task provides the means of ...

Result # 4      Relevance:

**Precise Interrupt Handling for Out-of-Order Instruction Execution**

1999-09-01

IPCOM000123996D

English

A new interrupt processing method for out-of-order executed instructions on superscalar systems is introduced. It provides precise interrupt reporting as required for a lot of core architectures.

Result # 5      Relevance:

**Efficient Task Switching With An Off-Load Processor**

1979-11-01

IPCOM000068186D

English

One method of increasing the performance of a computing system involves increasing the number of processors performing the work. The usual approach has been to provide multiple processors in some sense symmetric, both executing both system and application code. ...

Result # 6      Relevance:

**Method for dynamic lockout avoidance in a SMT processor**

2005-01-04

IPCOM000033913D

English

In a simultaneous multi-threaded (SMT) processor, a thread may become "locked out" from making forward progress by the other thread(s). Disclosed is a method to dynamically thread "lockout" by guaranteeing that each thread make ...

Result # 7      Relevance:

**Processor Single Step Trace Facility Enhancements**


1996-12-01

IPCOM000118286D

English

Providing instruction and address traces is a very important part of system tuning and design. There are many different methodologies for providing this support, each of which has its own benefits and problems. Disclosed is a reasonably cost-effective approach ...

---

Result # 8      Relevance: 

**Use of the SYNC Instruction to Synchronize Completion of Translation Buffer Invalidate in a Multi-Processor System**

1994-05-01

IPCOM000112440D

English

Disclosed is a hardware solution for synchronization of Translation Look-aside Buffer (TLB) in a Symmetric Multi-Processor System (SMP). By using the SYNC instruction in conjunction with the TLB Invalidate (TLBI) instruction, a method is described to ensure ...

---

Result # 9      Relevance: 

**Wiring SPR out to hardware in-memory trace for a programmable soft-core capability**

2005-05-04

IPCOM000124721D

English

Most modern processors contain specialized hardware to record hardware performance events that occur during instructions processing. These traces can be collected from processor core buses. Typically hardware traces provide data used to simulate system ...

---

Result # 10      Relevance: 

**Processor supporting asymmetric multithreading capability**

2002-08-11

IPCOM000016150D

English

Described is a microprocessor with multithreading capabilities. Typical multithreading hardware to replicate the entire processor state for all supported hardware threads, including, but not limited to, integer, floating point, condition registers segment ...

---

Displaying page 1 of 50    << FIRST | < BACK | [NEXT >](#) | [LAST >>](#)

---

**Search query:** A virtual multithreading hardware mechanism provides multi-threading on a processor. Thread switches are triggered by user-defined triggers. Synchronous triggers are defined in the form of special trigger instructions. Asynchronous triggers may be defined by special marking instructions that identify an asynchronous trigger condition. A trigger condition may be based on a plurality of atomic processor events. Minimum information, such as only an instruction pointer address, is maintained by the thread switch. In contrast to traditional simultaneous multithreading schemes, the disclosed multithreading hardware provides thread switches that are transparent to an application and that may be performed without operating system intervention.

[New search](#) | [Modify this search](#)

Copyright © 2007 IP.com, Inc. All rights reserved. |